

IN THE CLAIMS:

Please cancel claims 1-~~18~~, 21, 25, 26, 27, and 29
without prejudice.

Please amend claims 20, 22, 28, 30, 37 and 40, as
follows:

120. (Amended) In a battery conditioning system,
[according to claim 17] a portable battery powered utilization
device

of size and weight to be held in one hand
during use, and operating from battery power
during portable operation thereof,

battery means operatively coupled with said utilization
device for supplying operating power thereto
during portable operation,

battery conditioning system means coupled with
said utilization device during conditioning
operation and operatively coupled with said
battery means and comprising battery
conditioning means for effecting conditioning
of said battery means, and

battery parameter sensing means for sensing a battery parameter,
said battery conditioning system means including computer
operating means operatively coupled with said
battery conditioning means and controlling
conditioning of said battery means in
conjunction with said battery parameter
sensing means,

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said computer operating means having communications means for the
transmission of data concerning said battery means to a remote
station.

22. (Amended) In a battery conditioning system
[according to claim 21] a portable battery powered utilization
device

of size and weight to be held in one hand
during use, and operating from battery power
during portable operation thereof,

battery means operatively coupled with said utilization
device for supplying operating power thereto
during portable operation,

battery conditioning system means coupled with
said utilization device during conditioning
operation and operatively coupled with said
battery means and comprising battery
conditioning means for effecting conditioning
of said battery means, and

battery parameter sensing means for sensing a battery parameter,
said battery conditioning system means including computer
operating means operatively coupled with said
battery conditioning means and controlling
conditioning of said battery means in
conjunction with said battery parameter
sensing means,

said battery conditioning system means being responsive to a
computer generated control signal from the computer operating
means, and controlling the supply of charging current to said
battery means during a conditioning operation in accordance with
said computer generated control signal,

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said battery conditioning system means comprising a charging current control circuit for receiving a control signal and for controlling the supply of charging current to said battery means according to said control signal, and control signal generating means for generating a default value of said control signal in the absence of a computer generated control signal from the computer operating means, and said computer operating means being coupled with said control signal generating means for altering the value of charging current away from said default value according to a computer generated control signal from said computer operating means.

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528. (Amended) In a battery conditioning system,
[according to claim 27] a portable battery powered utilization device

of size and weight to be held in one hand
during use, and operating from battery power
during portable operation thereof,

battery means operatively coupled with said utilization
device for supplying operating power thereto
during portable operation,

battery conditioning system means coupled with
said utilization device during conditioning
operation and operatively coupled with said
battery means and comprising battery
conditioning means for effecting conditioning
of said battery means, and

battery parameter sensing means for sensing a battery parameter,
said battery conditioning system means including computer
operating means operatively coupled with said
battery conditioning means and controlling

conditioning of said battery means in
conjunction with said battery parameter
sensing means,

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said computer operating means having communications means for the
transmission of data concerning said battery means, said
communications means comprising digital to analog converter means
in said utilization device and controlled by said computer
operating means for supplying an analog output signal to said
battery conditioning means

said battery conditioning means comprising an external battery
charging circuit external to said utilization device, and having
a control signal generating means for establishing a default
value of battery charging current to be supplied by said circuit
in the absence of an analog output signal from said digital to
analog converter means.

30. (Amended) A portable battery powered system
comprising a portable battery powered utilization device
operating from battery power during portable
operation,
battery means operatively coupled with said
utilization device for supplying operating
power thereto during portable operation, and
conditioning control means comprising computer
operating means having computer output means
for coupling with an external battery
conditioning circuit during conditioning of
the battery means, with said computer
operating means of said portable utilization
device supplying a computer generated control
signal according to a measured battery

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parameter and to a battery charging circuit
to control charging current supplied to said
battery means during a battery charging
operation.

Claim ¹³~~17~~ (Amended) A portable battery powered
system [according to claim 30,] comprising a portable battery
powered utilization device

operating from battery power during portable
operation.

battery means operatively coupled with said

utilization device for supplying operating
power thereto during portable operation, and

conditioning control means comprising computer

operating means having computer output means
for coupling with an external battery
conditioning circuit during conditioning of
the battery means.

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with said computer output means comprising digital to analog
converter means for receiving a computer generated control signal
from the computer operating means and for supplying an analog
output signal to an external battery current supply circuit so as
to control the value of charging current supplied to said battery
means.

Claim ¹⁶~~18~~ (Amended) A portable battery powered system
[according to claim 30,] comprising a portable battery powered
utilization device

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operating from battery power during portable
operation.

battery means operatively coupled with said